

Notice of Allowability

Application No.

09/871,413

Examiner

Pedro J. Cuevas

Applicant(s)

MACHIROTU, SRIDHAR V.

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on January 28, 2003.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☒ The drawings filed on 30 May 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-19 are allowed.
2. The following is an examiner's statement of reasons for allowance.

Ko et al. clearly teaches the construction of a CPU heat dissipating device with air-guiding units comprising:

a stator component (1) including a heat pipe (Figure 7) which includes a length located adjacent subsequent ones of the fins of the first set of fins;

a rotor component (2) mounted to the stator component for rotation about an axis;

a first set of blades (Figures 6 and 7) mounted to the rotor component, the blades expelling air therefrom in a radial direction away from the axis upon rotation of the rotor component (arrows of Figure 7);

a substantially circular first set of fins (12, 13) mounted to the stator component, the length of the heat pipe, in an arrangement at least partially/entirely surround the first set of blades;

the stator component is a shroud (1) forming an enclosure with the blades and the fins in the enclosure, the shroud having an inlet port (top left portion of Figure 7) to allow air into the enclosure substantially in direction of the axis, and an exit port (right hand portion of Figure 7) allowing air out of the enclosure substantially in a direction away from the axis; and

wherein at least 90% of air from the enclosure is expelled to one side of the shroud out of the exit port, and at least some of the fins of the first set of fins are located between at least some of the blades of the first set of blades and the exit port.

The prior art of record, taken alone or in combination, fails to teach the construction of:

a fan assembly as claimed on independent claim 1, comprising a second set of blades mounted to the rotor component around the first set of fins air leaving the first set of blades passing over the first set of fins, whereafter the air is expelled by the second set of blades; and

a fan assembly as claimed on independent claim 17, having first and second set of blades mounted to the rotor component so as to be rotatable together with the rotor component, each set of blades forming a circular arrangement with the first set of blades located within the circular arrangement of the first set of fins and the second set of blades located within a circular gap defined outerly of the circular arrangement of the first set of fins and internally of the circular arrangement of the second set of fins.

Dependent claims 2-4, 6-16, and 18-19 are considered allowable by their respective dependence on allowed independent claims 1 and 17.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
April 2, 2003



Nicholas Ponomarenko
Primary Examiner
Technology Center 2800